HQ-0221

Shipped in packet-tape reel(5,000pcs per reel)

Notice : It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

●Absolute Maximum Ratings

Item	Symbol	Limit	Unit
Max. Input Voltage	V_C	6	V
Max.Input Current	I_C	17	mA
Operating Temp. Range	Topr.	−40 ～ +125	℃
Storage Temp. Range	Tstg.	−40 ～ +150	℃

●Electrical Characteristics(T_a=25℃)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Output Hall Voltage	$V_{H(i)}$ ※2	B=50mT, V_C=3V	90		130	mV
Relative Output Voltage Ratio	V_{Hr} ※3	B=50mT, V_C=3V	95		105	%
Input Resistance	R_{in}	B=0mT, I_C=0.1mA	370		570	Ω
Output Resistance	$R_{out(i)}$	B=0mT, I_C=0.1mA	750		1150	Ω
Relative Resistance Ratio	R_{outr} ※4	B=0mT, I_C=0.1mA	95		105	%
Offset Voltage	$V_{OS}(V_u)$	B=0mT, V_C=3V	−6		+6	mV
Temp. Coefficient of V_H	αV_H ※5	B=50mT, V_C=3V Ta=25～125℃		−0.2		%/℃
Temp. Coefficient of R_{in}	αRin ※6	B=0mT, I_C=0.1mA Ta=25～125℃		−0.2		%/℃

※2. $V_H = VHM - V_{os}(V_u)$ (VHM:meter indication)

※3. $V_{H(i)}$(i=1.2) is Hall output voltage of 2-Hall Elements of one package.
$V_{Hr\ min}=\min(V_{H(i)})/V_{Havg.}X100$, $V_{Hr\ max}=\max(V_{H(i)})/V_{Havg.}X100$
Where $V_{Havg.}=(V_{H(1)}+V_{H(2)})/2$

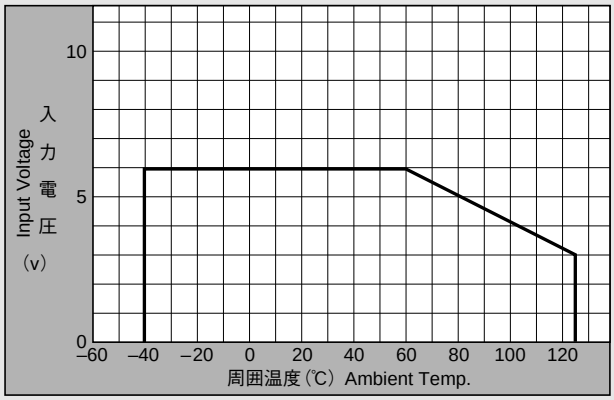
※4. $R_{out(i)}$(i=1.2) is output resistance of 2-Hall Elements of one package.
$R_{out\ r\ min}=\min(R_{out(i)})/R_{out\ avg.}X100$, $R_{out\ r\ max}=\max(R_{out(i)})/R_{out\ avg.}X100$
$R_{outavg}=(R_{out(1)}+R_{out(2)})/2$

※5. $\alpha V_H = \frac{1}{V_H(T_1)} \times \frac{V_H(T_2)-V_H(T_1)}{(T_2-T_1)} \times 100$

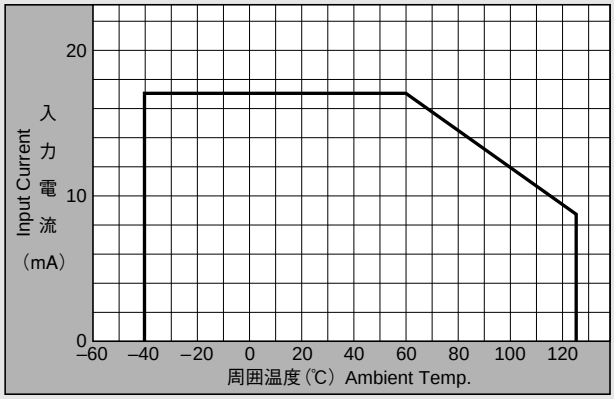
※6. $\alpha R_{in} = \frac{1}{R_{in}(T_1)} \times \frac{R_{in}(T_2)-R_{in}(T_1)}{(T_2-T_1)} \times 100$

T_1 = 25˚C, T_2 = 125˚C

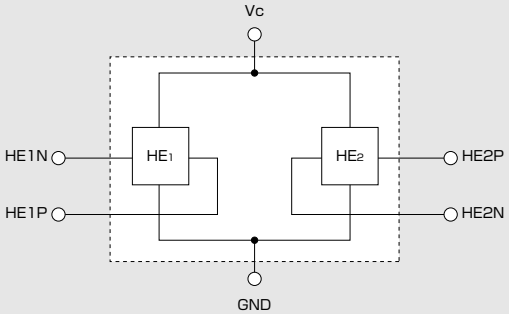
●Input Voltage Derating Curve



●Input Current Derating Curve



●Pinning



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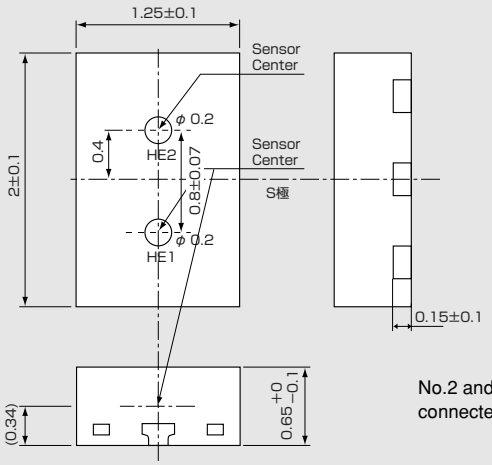
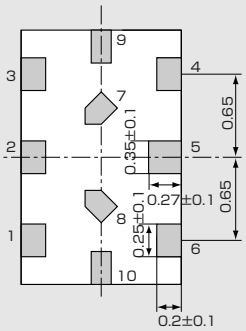
•Handling precautions required for preventing electrostatic discharge.

•This product contains galium arsenide (GaAs) .Handling and discarding precautions required.

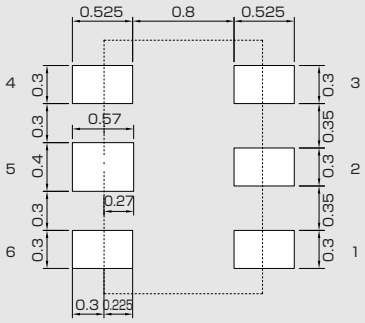
●Dimensional Drawing(Unit : mm)





No.2 and No.7～10 terminals are electrically connected.

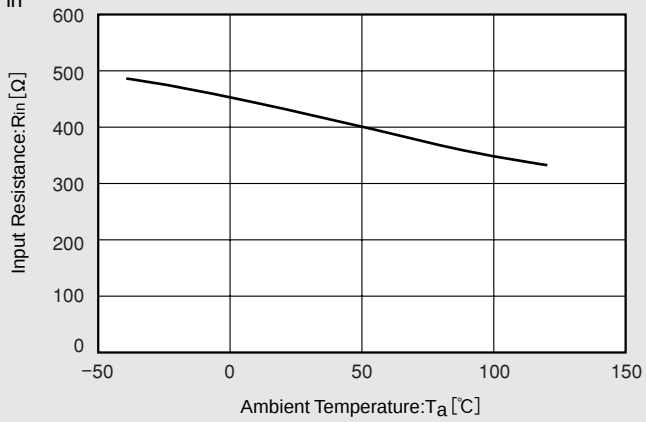
●Land pattern (for reference only) (Unit : mm)



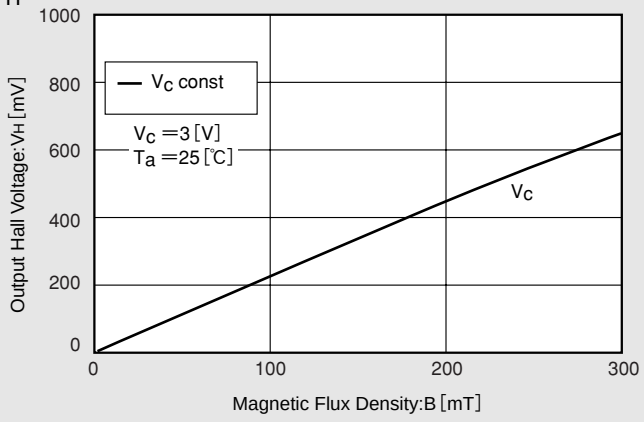
Pinning	
1:HE1P	4:HE2P
2:GND	5:Vc
3:HE2N	6:HE1N

●Characteristic Curves

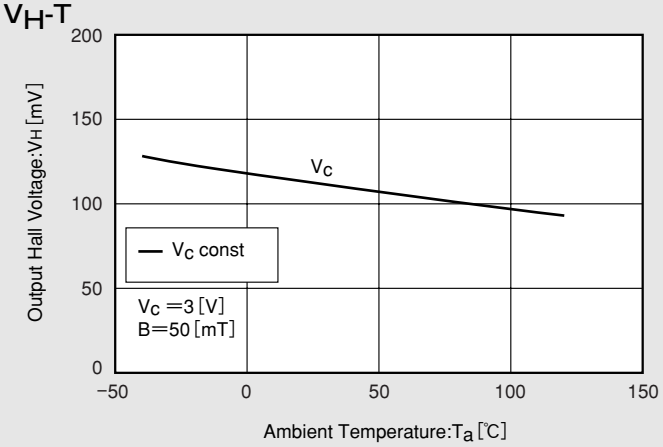
R_{in}-T



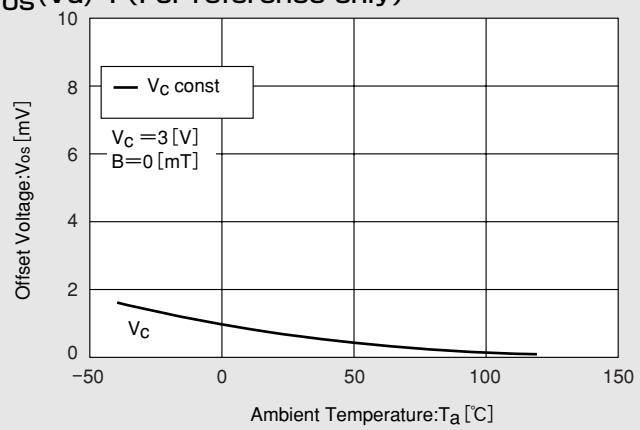
V_H-B



V_H-T



V_{os}(Vu)-T (For reference only)



※Magnetic Flux Density
1 [mT] =10 [G]

in This Example:R_{in}=425〔Ω〕、V_{os}=0.8〔mV〕〔Vc=3〔V〕〕

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June 2, 2010